

Title (en)

Process for the autothermal catalytic steam reforming of hydrocarbons

Title (de)

Verfahren zur autothermen, katalytischen Dampfreformierung von Kohlenwasserstoffen

Title (fr)

Procédé autothermique catalytique de réformage à la vapeur d' hydrocarbures

Publication

EP 1157968 B2 20090121 (DE)

Application

EP 01110816 A 20010504

Priority

DE 10025032 A 20000520

Abstract (en)

[origin: EP1157968A1] The autothermal catalyst steam reforming of hydrocarbons by the passage of a pre-warmed reactant mixture of hydrocarbons, oxygen and water or water vapor over a catalyst comprises adiabatic operation of the process with a platinum group metal catalyst supported on an oxide support comprising aluminum oxide, silicon dioxide and/or titanium dioxide with zeolites.

IPC 8 full level

C01B 3/40 (2006.01); **C01B 3/38** (2006.01); **H01M 8/06** (2006.01)

CPC (source: EP KR US)

B01J 23/63 (2013.01 - EP US); **C01B 3/36** (2013.01 - KR); **C01B 3/382** (2013.01 - EP US); **C01B 3/40** (2013.01 - EP KR US); **C01B 2203/0233** (2013.01 - KR); **C01B 2203/1023** (2013.01 - KR); **C01B 2203/1029** (2013.01 - KR); **C01B 2203/1064** (2013.01 - EP US); **C01B 2203/107** (2013.01 - EP KR US); **C01B 2203/1082** (2013.01 - EP US); **C01B 2203/1094** (2013.01 - EP KR US); **C01B 2203/1235** (2013.01 - KR); **C01B 2203/1258** (2013.01 - KR); **C01B 2203/142** (2013.01 - EP US); **C01B 2203/82** (2013.01 - EP US); **Y02P 20/52** (2015.11 - EP US)

Citation (opposition)

Opponent :

- US 4522894 A 19850611 - HWANG HERNG-SHINN [US], et al
- WO 0048805 A1 20000824 - ALLIED SIGNAL INC [US]
- GB 2274284 A 19940720 - SNAM PROGETTI [IT]
- J.K. HOCHMUTT: "Applied Catalysis B: Environmental", vol. 1, 1992, pages: 89 - 100

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DE10253930A1; US6949683B2; US7150866B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1157968 A1 20011128; **EP 1157968 B1 20060503**; **EP 1157968 B2 20090121**; AT E325075 T1 20060615; BR 0102041 A 20011218; BR 0102041 B1 20120821; CA 2348120 A1 20011120; CA 2348120 C 20100824; DE 10025032 A1 20011129; DE 50109665 D1 20060608; DK 1157968 T3 20060710; DK 1157968 T4 20090504; ES 2261292 T3 20061116; ES 2261292 T5 20090609; JP 2002012408 A 20020115; JP 4833435 B2 20111207; KR 100801861 B1 20080212; KR 20010106274 A 20011129; US 2002009408 A1 20020124; US 7083775 B2 20060801

DOCDB simple family (application)

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